

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today  
(1) was not written for publication in a law journal and  
(2) is not binding precedent of the Board.

Paper No. 24

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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Ex parte RICHARD B. ANGELL

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Appeal No. 95-0394  
Application 08/065,786<sup>1</sup>

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ON BRIEF

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Before URYNOWICZ, JERRY SMITH, and BARRETT, Administrative  
Patent Judges.

JERRY SMITH, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on the appeal under 35 U.S.C. § 134

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<sup>1</sup> Application for patent filed May 24, 1993

from the examiner's final rejection of claims 10-17. Claims 1-9 were indicated by the examiner as being allowed.

The disclosed invention pertains to a method and apparatus for generating a wipe solid. A wipe solid is used for creating transitions between two video signals. The invention of independent claim 10 is directed to the method for loading data into memories having a specific relationship to the data and reading the data from these memories along with a video signal to generate a wipe solid signal.

Independent claim 10 on appeal is reproduced as follows:

10. A method of generating a wipe solid, comprising:
  - (a) calculating numerical values,
  - (b) loading numerical values into a first memory having one memory location for each pixel during the active interval of a line of a video signal,
  - (c) loading numerical values into a second memory having one memory location for each line during a field of a video active signal,
  - (d) reading numerical values from the first and second memories synchronously with a video signal, and
  - (e) carrying out a combinational arithmetic

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operation on the numerical values read from the memories and providing an output signal dependent on the result of the operation.

The examiner relies on no references.

Claims 10-17 stand rejected under 35 U.S.C. § 101 as being directed to nonstatutory subject matter in the form of a mathematical algorithm.

Rather than repeat the arguments of appellant or the examiner, we make reference to the brief and the answer for the respective details thereof.

#### OPINION

We have carefully considered the subject matter on appeal, the rejection advanced by the examiner and the reasons relied upon by the examiner as support for the rejection. We have, likewise, reviewed and taken into consideration, in reaching our decision, the appellant's arguments set forth in the brief along with the examiner's rationale in support of the rejection and arguments in rebuttal set forth in the examiner's answer.

It is our view, after consideration of the record before us, that claims 10-17 are directed to statutory subject

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matter within the meaning of 35 U.S.C. § 101. Accordingly, we reverse.

With respect to the rejection of the claims under 35 U.S.C. § 101 as being directed to nonstatutory subject matter in the form of a mathematical algorithm, the appeal brief and the examiner's answer were filed in the middle of 1994. The Board remanded this case to the examiner in 1995 for consideration of the applicability of the Commissioner's published "Examination Guidelines for Computer-Implemented Inventions." On remand, the examiner determined that the rejection under 35 U.S.C. § 101 was still proper, and the case is now before us for decision on the merits.

The examiner's rejection applies the two-step test which is now commonly referred to as the Freeman-Walter-Abele test. See In re Freeman, 573 F.2d 1237, 197 USPQ 464 (CCPA 1978) as modified by In re Walter, 618 F.2d 758, 205 USPQ 397 (CCPA 1980). The test has been thus articulated:

First, the claim is analyzed to determine whether a mathematical algorithm is directly or indirectly recited. Next, if a mathematical algorithm is found, the claim as a whole is further analyzed to determine whether the algorithm is "applied in any manner

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to physical elements or process steps," and,  
if it is, it "passes muster under § 101."

In re Pardo, 684 F.2d 912, 915, 214 USPQ 673, 675-76 (CCPA  
1982)

(citing In re Abele, 684 F.2d 902, 214 USPQ 682 (CCPA 1982)).

The examiner's application of the Freeman-Walter-Abele test led the examiner to conclude that claims 10-17 were directed to nothing more than a mathematical algorithm. Appellant argues that the loading of data into a memory and the reading of data from a memory encompass physical activities, and appellant points out that the generation of a wipe solid produces a useful signal which is needed to produce the transitions from one video signal to another on a television set.

Although the examiner applied the Freeman-Walter-Abele test in a manner which was consistent with the law at that time, the most recent decisions of the Court of Appeals for the Federal Circuit cast substantial doubt on the propriety of this test.

It is the current view of the court that unpatentable mathematical algorithms are identifiable by showing that they

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are merely abstract ideas constituting disembodied concepts or truths that are not "useful." From a practical standpoint, this means that to be patentable an algorithm must be applied in a "useful" way. See State Street Bank & Trust Co. v. Signature Financial Group, Inc., 149 F.3d 1368, 47 USPQ2d 1596 (Fed. Cir. 1998).

Independent claim 10 is directed to a method for loading data into a specifically-configured memory and to the combination of this stored data with a video signal to generate a wipe solid. The claim recites a specific relationship between the memories and the characteristics of a video signal, and the claim combines outputs from these memories synchronously with the video signal. We are of the view that the claimed method for generating a wipe solid clearly has practical utility. Even if a "mathematical algorithm" is used to combine the stored data with the video signal and could be considered an abstract idea, that abstract idea is clearly employed in a useful way. The invention of claim 10 is not directed to the mere computation of one set of values from another set of values, but rather, to the physical and useful steps of loading data into and reading data from

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specifically-configured memories to generate a wipe solid.  
Since the claimed invention has practical application for the reasons just discussed, we do not sustain the rejection of independent claim 10 under 35 U.S.C. § 101. Since claims 11-16 depend from claim 10, we also do not sustain the rejection of these claims. Independent claim 17 has similar recitations to independent claim 10 so that we also do not sustain the rejection of claim 17.

The decision of the examiner rejecting claims 10-17 is reversed.

REVERSED

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STANLEY M. URYNOWICZ	)	
Administrative Patent Judge	)	
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	)	
	)	BOARD OF PATENT
JERRY SMITH	)	
Administrative Patent Judge	)	APPEALS AND
	)	
	)	INTERFERENCES
	)	
LEE E. BARRETT	)	
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